NOVEMBER/DECEMBER 2024

23PCS21 — DATA MINING AND WAREHOUSING

Time : Three hours Maximum : 75 marks

Sri Ramnuga Industries Arts & Science College T.V.Malai

SECTION A — (10 × 2 = 20 marks)

Answer ALL the questions.

1. How is similarity measures used in data mining?
2. Name some common data mining techniques.
3. How do decision free-based algorithms work?
4. Define distance-based algorithms in classification.
5. What is clustering and why is it important in data mining?
6. Define hierarchical clustering algorithm.
7. What is online analytical processing (OLAP)?
8. What is a data warehousing?
9. How do performance considerations impact data warehouse design?
10. List some tools used for data warehousing.

SECTION B — (5 × 5 = 25 marks)

Answer ALL the questions.

11. (a) Explain basic data mining tasks.

Or

(b) Show decision tree differ from neural networks in data mining.

12. (a) Explain the Concept of classification in data mining.

Or

(b) Discuss Rule based algorithm and their applications in data mining.

13. (a) Explain Outliers in Clustering algorithms.

Or

(b) What are the advanced association rules techniques in data mining?

14. (a) Compare and Contrast OLTP and OLAP.

Or

(b) Discuss data modeling in the context of data warehousing.

15. (a) Explain the role of metadata in data warehousing design and maintenance.

Or

(b) Examine the tools commonly used for data warehousing.

SECTION C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Evaluate the challenges and issues faced in data mining.

17. Analyze the effectiveness of decision tree based algorithm in classification tasks.

18. Compare different approaches for measuring the quality of association rule.

19. Evaluate the state of the market for OLAP tools.

20. Analyze the distribution of data within data warehouse and its impacts on query performance.

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